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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/442,885	11/18/1999	YUICHI TERUI	FUJR-16.680	6518

26304 7590 09/15/2003

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EXAMINER

LONSBERRY, HUNTER B

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 09/15/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/442,885

Applicant(s)

TERUI ET AL.

Examiner

Hunter B. Lonsberry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 12, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,953,506 to Kalra in view of U.S. Patent 5,805,203 to Horton.

Regarding claims 1,3, and 6, Karla discloses a system which includes a number of transcoders 124 and MPEG encoders 122 which encodes a number of sub band streams which, when combined, yield progressively higher quality MPEG video images, a graphics server in the head end continuously polls a client machine to observe network bandwidth and CPU constraints to dynamically update the number of streams which are to be sent to a specific machine where they are decoded based upon the current conditions (Figures 15-16, column 3, line 66-column 4, line 32, column 5, line 4-coumn 6, line 53, column 8, line 33-65, column 14, line 34-column 19, line 64). Karla does not disclose error status monitoring means to monitor the error status of each terminal and sending that status message to the video data distribution unit. Horton discloses a global connection manager 11 which monitors the connection between customer premises equipment 2 and a service node 1 which includes a transmitter receiver 16, manager 11 continuously monitors both the upstream and downstream

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connections to remote user equipment for the noise levels for those connections, depending upon that noise level additional bandwidth may be dynamically allocated to the data channel for the user, additionally upon determining a noise level the encoding factor may change to a more noise immune level or to a faster data transfer rate (column 3, lines 54-column 4, line 17, column 5, line 27-column 7, line 19). Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the dynamic encoding feature of Karla to include the noise monitoring and dynamic encoding features of Horton in order to provide the most appropriate video stream to a user for the current conditions.

Regarding claims 2 and 4, Horton discloses a downstream data-encoding factor which determines the data rate to transmit at to a specific device (column 5, table 1, lines 28-column 7, line 19).

Regarding claim 5, Horton discloses varying the traffic every 10 seconds (column 15, lines 33-44).

Regarding claim 12, Karla discloses a system which dynamically transmits video programs to a user depending on current conditions. Karla/Horton do not disclose providing information on what video programs are being submitted. The examiner takes official notice that transmitting an electronic program guide to a user to display what programs are being transmitted is well known in the art. Therefore it would have been obvious to one skilled in the art at the time of invention to modify Karla/Horton to transmit an EPG so that a user would know what programs they could choose from.

Regarding claims 13-15, Karla discloses a system which includes a number of transcoders 124 and MPEG encoders 122 which encodes a number of sub band streams which, when combined, yield progressively higher quality MPEG video images, a graphics server in the head end continuously polls a client machine to observe network bandwidth and CPU constraints to dynamically update the number of streams which are to be sent to a specific machine where they are decoded based upon the current conditions (Figures 15-16, column 3, line 66-column 4, line 32, column 5, line 4-column 6, line 53, column 8, line 33-65, column 14, line 34-column 19, line 64). Karla does not disclose error status monitoring means to monitor the error status of each terminal and sending that status message to the video data distribution unit. Horton discloses a global connection manager 11 which monitors the connection between customer premises equipment 2 and a service node 1 which includes a transmitter receiver 16, manager 11 continuously monitors both the upstream and downstream connections to remote user equipment for the noise levels for those connections, depending upon that noise level additional bandwidth may be dynamically allocated to the data channel for the user, additionally upon determining a noise level the encoding factor may change to a more noise immune level or to a faster data transfer rate (column 3, lines 54-column 4, line 17, column 5, line 27-column 7, line 19). Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the dynamic encoding feature of Karla to include the noise monitoring and dynamic encoding features of Horton in order to provide the most appropriate video stream to a user for the current conditions.

Claims 7-11 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,953,506 to Kalra in view of U.S. Patent 5,805,203 to Horton in further view of U.S. Patent 6,295,376 to Nakaya.

Regarding claims 7-9 and 16-18, Karla/Horton disclose system in which differently encoded MPEG transmissions are sent to a user depending on the performance level and error rate associated with that user. Karla/Horton do not disclose utilizing inter/intraframe coding modes depending upon the current conditions. Nakaya discloses a system in which both interframe encoding mode and intraframe encoding modes may be selectively actuated, a flag is transmitted with the data informing the receiver which mode to select for proper decoding (column 1, line 54-column 2, line 67). Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the encoding system Karla/Horton to select which mode to encode the MPEG images as taught by Nakaya thereby encoding the video for the user based upon current line conditions and user performance.

Regarding claims 10, 11, 19 and 20, Karla/Horton/Nakaya disclose a system in which video is dynamically encoded for transmission to a user based upon current conditions. Karla/Horton/Nakaya do not disclose selectively decoding either intracoded or interceded frames. The examiner takes official notice that selectively decoding inter/intraframes are well known in the art, for example a trickplay stream. Therefore it would have been obvious to one skilled in the art at the time of invention to modify

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Karla/Horton/Nakaya to selectively decode inter/intraframes at the time of invention in order to provide the user with the best video quality that current conditions can provide.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 703-305-3234. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

HBL

  
CHRIS GRANT  
PRIMARY EXAMINER